



IN THE CLAIMS:

Please amend claims 17, 18, 23, 26-33, 35-37, 39, and 40, cancel claims 24 and 25 without prejudice or disclaimer, and add new claims 41-43, as follows.

Claims 1-16. (Cancelled)

17. (Currently Amended) A method for restoring a subscriber context in a mobile communication network which comprises at least a serving GPRS node (SGSN) and a Gateway GPRS Support Node (GGSN), the GGSN storing a plurality of subscriber contexts related to the SGSN, the method comprising the steps of:

storing restart information for the a serving GPRS support node (SGSN) at the a gateway GPRS support node (GGSN), the restart information indicating whether the SGSN has been restarted;

receiving a packet data protocol (PDP) context message at the GGSN from the SGSN, the PDP context message including restart information indicating whether the SGSN has been restarted and whether a subscriber context has been updated in the SGSN after the latest restart;

creating a response to the PDP context message at the GGSN, wherein the response includes restart information indicating whether the GGSN has been restarted;

transmitting the response to the SGSN from the GGSN;

comparing the restart information of the PDP context message received in the receiving step with the stored restart information stored for the SGSN at the GGSN; and inactivating all subscriber contexts which are stored in the GGSN for use of the SGSN and have been updated before the latest restart of the SGSN when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN.

18. (Currently Amended) A method according to claim 17, wherein said restart information comprises a restart counter value ~~and is transmitted together with a context signaling message.~~

19. (Previously Presented) A method according to claim 18, wherein said restart counter value is compared with a stored restart counter value so as to determine said subscriber context updated before the latest restart.

20. (Previously Presented) A method according to claim 19, wherein said stored restart counter value is updated on the basis of said transmitted restart counter value.

21. (Previously Presented) A method according to claim 17, wherein said restart information is transmitted only one time after said latest restart.

22. (Previously Presented) A method according to claim 17, wherein said restart information is transmitted together with a tunnel management signaling message.

23. (Currently Amended) A method according to claim 2217, wherein said subscriber PDP context message is a create or update PDP context request message.

24-25. (Cancelled)

26. (Currently Amended) A system for restoring a subscriber context in a network element of a communication network ~~which comprises at least a Serving GPRS Support Node (SGSN) and a Gateway GPRS Support Node (GGSN), the GGSN storing a plurality of subscriber contexts related to the SGSN~~, comprising:

~~storing unit configured to store means for storing~~ restart information for ~~the a serving GPRS support node (SGSN) at the a gateway GPRS support node (GGSN) the~~ restart information indicating whether the SGSN has been restarted;

~~first-receiving means for receiving~~ unit configured to receive a packet data protocol (PDP) context message at the GGSN from the SGSN, the PDP context message including restart information indicating whether the SGSN has been restarted and ~~whether a subscriber context has been updated in the SGSN after the latest restart;~~

~~control means for continuing~~ unit configured to the use of a subscriber context updated after said latest restart and for inactivation of the plurality of inactivate all

subscriber contexts which are stored in the GGSN related to the SGSN and have been updated before said latest restart, in response to said restart information; and

~~transmitting means for transmitting unit configured to transmit a response message restart information from the GGSN second network element to the SGSN first network element,~~

~~including a restart counter configured to count for counting a restart number and adding means for adding unit configured to add said restart number to a subscriber context message,~~

wherein the communication network includes at least the SGSN and the GGSN,
the GGSN storing a plurality of subscriber contexts related to the SGSN.

27. (Currently Amended) A system according to claim 26, wherein said GGSN comprises ~~a comparing means for comparing unit configured to compare said restart number received with a restart number stored in a storing means unit and for supplying to supply the comparing result to said control means unit.~~

28. (Currently Amended) A system according to claim 26, wherein said control means unit is configured to perform performs control so as to store a new subscriber context included in said subscriber context message and to delete an old subscriber context stored in said GGSN.

29. (Currently Amended) A system according to claim 26, wherein said transmitting ~~means-unit~~ comprises ~~a~~ the restart counter for counting ~~configured to count~~ a restart number, ~~and switching means for switching said restart number to said transmitting means so as to be transmitted separately or in a separate message to said SGSN~~, and wherein said control ~~means~~ ~~unit~~ is ~~configured~~ arranged to delete or deactivate corresponding subscriber contexts received before the latest restart.

30. (Currently Amended) A system according to claim 26, ~~wherein at least one of said network elements is a GPRS support node and wherein said subscriber context is a PDP context.~~

31. (Currently Amended) A Serving GPRS Support Node (SGSN) for a mobile communication network, comprising:

~~transmitting means for transmitting unit configured to transmit a packet data protocol (PDP) context message restart information from the SGSN to a Ggateway GPRS support Nnode (GGSN), the PDP context message including restart information, the restart information indicating whether the SGSN has been restarted and whether a subscriber context has been updated in the SGSN after the latest restart; and~~

~~receiving means for receiving unit configured to receive a PDP context message from the GGSN, the PDP context message including restart information from the GGSN, the restart information indicating whether the GGSN has been restarted and whether a~~

~~received subscriber context has been updated in the GGSN after the latest restart; and control means for unit configured to inactivate all continuing use of the received subscriber context updated after said latest restart and for inactivating a plurality of subscriber contexts stored in the SGSN for use by the GGSN and having been updated before said latest restart in response to said restart information when the restart information of the message received from the GGSN in the receiving step differs from the restart information stored for the GGSN.~~

32. (Currently Amended) An SGSN according to claim 31, further comprising a restart counter for counting a restart number, and adding means for adding unit configured to add said restart number to the PDP a subscriber context message.

33. (Currently Amended) An SGSN according to claim 31, wherein said PDP context message is a create or update PDP context message further comprising a restart counter for counting a restart number, and switching means for switching said restart number to said transmitting means so as to be transmitted separately or in a separate message.

34. (Cancelled)

35. (Currently Amended) An SGSN according to claim 31, wherein said restart

information comprises a restart number and wherein said SGSN comprises comparing means for comparing unit configured to compare said restart number with a restart number stored in a storing means-unit and for supplying to supply the comparing result to said control unitmeans.

36. (Currently Amended) An SGSN according to claim 3433, wherein said subscriber PDP context message is a create or update PDP context request message.

37. (Currently Amended) The method of claim 17, wherein the message received in the receiving step comprises a subscriber context create or update message.

38. (Previously Presented) The method of claim 37, further comprising creating, as the response to the message, a subscriber context at the GGSN and transmitting a subscriber context response to the SGSN, wherein the subscriber context response includes the restart information indicating whether the GGSN has been restarted.

39. (Currently Amended) A method for restoring a subscriber context in a mobile communication network that includes at least a Serving GPRS Support Node (SGSN) and a Gateway GPRS Support Node (GGSN), the SGSN storing a plurality of subscriber

~~contexts for use of the GGSN, and the GGSN storing a plurality of subscriber contexts for use of the SGSN, the method comprising the steps of:~~

storing, at a serving GPRS support node (SGSN) ~~the SGSN~~, restart information for a gateway GPRS support node ~~the (GGSN)~~ indicating whether the GGSN has been restarted;

receiving a packet data protocol (PDP) context message from the GGSN at the SGSN, wherein the PDP context message includes restart information;

comparing, at the SGSN, the restart information of the PDP context message with the restart information stored for the GGSN; and

inactivating all subscriber contexts that are stored in the SGSN for use of the GGSN except those subscriber contexts for use of the GGSN that have been updated after the latest restart of the GGSN when the restart information of the message received in the ~~receiving step~~ received PDP context message, differs from the restart information stored for the GGSN.

wherein the mobile communication network includes at least the SGSN and the GGSN, the SGSN storing a plurality of subscriber contexts for use of the GGSN, and the GGSN storing a plurality of subscriber contexts for use of the SGSN.

40. (Currently Amended) A Gateway GPRS Support Node (GGSN), for a mobile communication network, comprising:

~~transmitting means for transmitting unit configured to transmit a packet data protocol (PDP) context message restart information from the GGSN to a serving GPRS Support Node (SGSN), the PDP context message including restart information, the restart information indicating whether the GGSN has been restarted and whether a subscriber context has been updated in the GGSN after the latest restart;~~

~~receiving means for receiving unit configured to receive a PDP context message restart information from the SGSN, the PDP context message including restart information, the restart information indicating whether the SGSN has been restarted and whether a received subscriber context has been updated in the SGSN after the latest restart; and~~

~~control unit means for inactivating configured to deactivate all subscriber contexts which are stored in the GGSN for use by the SGSN and have been updated before the latest restart of the SGSN when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN; and~~

~~control means for continuing to continue use of the a received subscriber context created or updated after said latest restart and for inactivating a plurality of subscriber contexts stored in the GGSN for use by the SGSN and having been updated before said latest restart in response to said restart information when the restart information of the message received in the receiving step differs from the restart information stored for the SGSN.~~

41. (New) The gateway GPRS support node (GGSN) of claim 40, wherein said PDP context message is a create or update PDP context message.

42. (New) The gateway GPRS support node (GGSN) of claim 40, wherein said PDP context message is a create or update PDP context response message.

43. (New) An SGSN according to claim 31, wherein said SGSN is configured to add the restart information to the PDP context message only if the SGSN has been restarted and the SGSN sends the PDP context message to the GGSN for the first time after the restart.